**Algebra 2 Quiz Review**

**Sections 5.1-5.2**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Show that each function is a quadratic function by writing it in the form f(x)=ax+bx+c and identify a, b and c. State whether each parabola opens up or down and whether the coordinate of the vertex is the minimum value or the maximum value of the function. Give the approximate coordinates of the vertex.

1.  2) 

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

a=\_\_\_\_ a=\_\_\_\_

b=\_\_\_\_ b=\_\_\_\_

c=\_\_\_\_ c=\_\_\_\_

opens up or opens down opens up or opens down

maximum or minimum maximum or minimum

Vertex(\_\_\_ ,\_\_\_\_) Vertex(\_\_\_ ,\_\_\_\_)

1.  4) 

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

a=\_\_\_\_ a=\_\_\_\_

b=\_\_\_\_ b=\_\_\_\_

c=\_\_\_\_ c=\_\_\_\_

opens up or opens down opens up or opens down

maximum or minimum maximum or minimum

Vertex(\_\_\_ ,\_\_\_\_) Vertex(\_\_\_ ,\_\_\_\_)

Solve each equation. Give exact solutions. Then approximate each solution to the nearest hundredth, if necessary.

5. x=46 6. 3x=42

7. 7x+3=36 8. (x-4)=27

Find the unknown length in each triangle. Give answers to the nearest tenth.

9.

34

38

x

16

10.

u

76

k

23

11.

111